

11. (previously amended): The system of Claim 10 including means for switching between high definition uncompressed broadcast television channel and one standard uncompressed broadcast television channel and an uncompressed broadcast ancillary channel.

12. (previously added): The system of Claim 11 including means for generating an icon on a television receiver display indicating the presence of the stored uncompressed broadcast ancillary signals and means at the television receiver for accessing said store signal in said cache memory using said icon.

### **REMARKS**

Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The examiner has recited text starting from the bottom of page 3 stating that "When the main channels are sent under data compression such as MPG1 and MPG2, they do not require isolation." This embodiment is excluded from coverage by the claim language. This section of the text references an embodiment that is not covered by the current claims. Applicants are presently claiming a system where there is no such compression where uncompressed broadcast ancillary signals are sent and received. Applicant specifically makes reference in the description above of a television video show segment on page 2, line 18 and in one embodiment sent during the vertical blanking interval. A television video show segment is an uncompressed signal. On page 3, starting with line 25, the specification describes the embodiment of Fig. 2. It discusses the ancillary data is modulated to a digital sideband carrier. It mentions the need for sideband isolation between the channels. The quoted statement about data compression describes one way of providing isolation with one embodiment only but the text describes other methods using sideband. Further the specification describes, on page 4

beginning on line 20 and illustrated in Fig. 4, splitting one high definition television channel into two channels (source #1 and source #2). As discussed the transmitter transmits either the high definition channel frequency band or two standard television frequency bands. As further illustrated in Fig. 5 and on page 5 lines 13-19, the specification discusses and shows how a standard resolution digital broadcast for television is 188 Bytes and fits in the bandwidth of half the high resolution television bandwidth. On page 5 beginning on line 20 another embodiment is shown wherein the channels are time multiplexed. Clearly, uncompressed system is taught in the specification and the specification complies with the written description.

Claims 1, 4, 6-11 are rejected under 35 U.S.C. 102 ( e) as being anticipated by Rosengren et al., U.S. Patent No. 6,041,068 hereinafter Rosengren.

In the background of applicant's invention, applicant discussed that television broadcasting includes extensive editing of program material, particularly news broadcasting to fit the programming time constraints. It stated that it was highly desirable to enable the viewer to see this material. Video On Demand (VOD) system require significant dedicated amounts of television and other media content to send the selected segments. Further broadcasters are faced with the high cost of installing High Definition Television Broadcast equipment with an unknown and so far limited number of customers to make it worth while to broadcast high definition television. It is therefore desirable to provide other ways of attracting more viewers. Applicant's claimed invention provides a solution to these problems by broadcasting uncompressed broadcast television signals and separate ancillary uncompressed broadcast television signals with separate television show segment related to said main television signals. This is not taught by the Rosengren reference. Further there is no teaching of taking advantage of the capacity of the high definition television equipment to broadcast simultaneously two

uncompressed broadcast television signals to give the user the ability to receive and utilize both simultaneously. This is not taught by the Rosengren reference or the other references.

Claim 1 has been amended to emphasize the patentable features of the present invention.

Applicant's claim 1, as amended, calls for: "a television broadcast transmitter including means for generating and transmitting main uncompressed broadcast television signals and separate ancillary uncompressed broadcast television signals with separate television show segment related to said main television signals; a television receiver system for receiving said main television signals and for receiving and storing in a cache memory the uncompressed broadcast ancillary television signal including the separate television show segment; and selective means at the television receiver for providing either the uncompressed broadcast main television signals or the uncompressed broadcast ancillary television signals with the separate television show segment to a display of said television receiver."

This system is not taught in the Rosengren reference. The Rosengren reference discloses a method and arrangement for deriving an ancillary signal from a compressed digital video signal (e.g. MPEG). The DC coefficients of autonomously encoded pictures (I-pictures) are selected from the compressed signal. The ancillary signal thus obtained can be used for display in a picture-in picture television receiver. The ancillary signal is not a full uncompressed broadcast television signal as applicant teaches. It does not send both a main uncompressed broadcast television signal and an uncompressed broadcast ancillary television signal. The receiver does not receive both a main uncompressed broadcast and uncompressed broadcast ancillary television signal. The Rosengren receiver system does not have selective means at the television receiver for providing either the uncompressed broadcast main television signals or the uncompressed broadcast ancillary television signals with the separate television show segment to

a display of said television receiver. The Rosengren only starts with a compressed digital video signal. Claim 1, as amended, is therefore deemed allowable.

Claims 4, 6-7, and 10-12 dependent on Claim 1 are deemed allowable for at least the same reasons as Claim 1.

Claim 4, as amended, further calls for said television signals are transmitted over a digital television channel subdivided into several subchannels of multiplexed signals and wherein one of said subchannels contains said main uncompressed broadcast television signals and the other subchannels provide ancillary uncompressed broadcast signals.

Claim 6, as amended, further calls for said separate uncompressed broadcast ancillary television signal contains short television signal segments related to the main uncompressed broadcast signals and said cache stores said segments and said main uncompressed broadcast signals and contains control data providing means for removing and storing said segments and said receiver system includes means responsive to said control data for storing said segments and removing said short segments from said cache memory.

Claim 7 further calls for said uncompressed broadcast ancillary signals include ancillary and command and control signals.

Claim 10 further calls for said main uncompressed broadcast signals and ancillary uncompressed broadcast signals are different parts of a high definition uncompressed broadcast television signal. Nowhere is this very useful configuration taught or suggested in the references. There is no teaching of this anywhere. This is a solution to a long felt problem as discussed in the background.

Claim 11 further calls for means for switching between high definition uncompressed broadcast television channel and one standard uncompressed broadcast television channel and an

uncompressed broadcast ancillary channel. Nowhere is this very useful configuration taught or suggested in the references.

Claim 12 is dependent on Claim 11 and is therefore deemed allowable for at least the same reasons as Claim 11.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosengren in view of Yuen et al U.S. Patent No. 6,452,640; hereinafter Yuen. Claim 2 is dependent on Claim 1 and therefore calls for the means for generating and transmitting main uncompressed broadcast television signals and separate ancillary uncompressed broadcast television signals with separate television show segment related to said main television signals; the receiver system for receiving said main television signals and for receiving and storing in a cache memory the uncompressed broadcast ancillary television signal including the separate television show segment; and the selective means at the television receiver for providing either the uncompressed broadcast main television signals or the uncompressed broadcast ancillary television signals with the separate television show segment to a display of said television receiver. This is not taught in the Rosengren reference as discussed previously. Claim 2 further calls for “means for generating an icon on a television receiver display indicating the presence of the stored uncompressed broadcast ancillary signals and.” This is not taught in Rosengren reference. The Yuen reference does not teach or suggest an icon indicating the presence of a stored uncompressed broadcast ancillary signal. The Yuen reference describes a sound bite augmentation to a TV guide listing. It does not in any way teach an icon to indicate the presence of an uncompressed broadcast ancillary signal. It does not indicate the presence of any separate uncompressed broadcast television show. Neither reference teaches this. Further there is no suggestion in either Rosengren or Yuen that teaches means at the television receiver for accessing stored

uncompressed broadcast signal in said cache memory using an icon. There is no suggestion in either reference of accessing any ancillary television signal using an icon. Claim 2 is therefore deemed allowable over the cited references.

Claim 12 is further deemed allowable for at least the same reasons as claim 2.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosengren in view of Dougherty et al. U.S. Patent No. 5,737,025; hereinafter Dougherty.

The Dougherty reference discloses ancillary code that is added to a composite video signal in its active video portion. The Dougherty reference is a system for transmitting data in the same the same communication channel as a composite video signal. The composite video signal is transmitted in a frequency band and has a horizontal sync period. A selecting means selects a carrier having a carrier frequency within the frequency band at the beginning of each stepping period. Each stepping period has a duration equal to or integer multiple of the horizontal sync period. A modulating means modulates the data onto the selected carrier to produce a modulated data signal. A combining means combines the modulated data signal with the composite video signal. Fig. 1 illustrates a multi-level encoded signal monitoring system with a plurality of encoders 12-1, 12-2,...,12-N. Each encoder 12 may be located at a corresponding stage of distribution of a program signal and are designated as distribution point 1, distribution point 2,...,distribution point N. Each ancillary signal encoder adds a corresponding ancillary code into a corresponding segment of a unique multi-level identification information message of a composite video signal provided by a program source 14. A plurality of decoders 16 and 18 is associated with selected points of distribution of the composite video signal to decode the ancillary signal codes. The ancillary information is the codes illustrated in Figure 2. As stated on Col. 7, lines 47-51, "This ancillary code may be the data, such as the network ID or the local TV

station ID, contained in any of the segments shown in Fig. 2 depending upon the level of distribution at which the encoder is located. The system of the reference provides an in-home television audience measurement system that has non-intrusive detection and decoding of both the ancillary code, which is present in the television signal at the time the television signal is received by the in-home audience measurement system and which is transmitted with a television signal in a co-channel mode, and the in-home code, which is inserted into the RF television signal by the in-home television measurement system.

This is completely different from that claimed by applicant and from that presented by the examiner in the rejection. Applicant calls for “separate uncompressed broadcast ancillary television signals related to said main uncompressed broadcast television signals.” There is only a main television signal in the Dougherty reference. The ancillary signal is a data code and certainly not other uncompressed broadcast television signals as claimed by applicant. The Dougherty reference is a code such as a local data code. Claim 1 further call for, “a television receiver system for receiving said main uncompressed broadcast television signals and for storing in a cache memory the ancillary uncompressed broadcast television signals.” There is no storing in a cache memory any ancillary uncompressed broadcast television signals in the Dougherty reference or the Rosengren reference. Still further, there is no “selective means at the television receiver for providing either the main uncompressed broadcast television signals or the ancillary uncompressed television signals to display of said television receiver.”

Clearly, the Dougherty reference and Rosengren do not teach the elements of claim 3 and is not therefore obvious in view thereof.

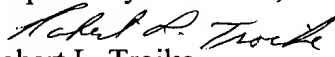
Claim 5 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Rosengren. Claim 5 calls for “The system of Claim 4 wherein said main uncompressed broadcast subchannel carries

the control data for updating and removing old subchannel segments and storing new ones. Claim 5 dependent on claim 4 is deemed allowable for at least the same reasons as claim 4. The claim further calls for the main uncompressed broadcast subchannel carries the control data for updating and removing old subchannel segments and storing new ones. The examiner has not presented any references to teach this. There is nothing to even teach updating and removing uncompressed subchannel signals or the concept of storing uncompressed television signals and storing segments and updating segments as taught and claimed herein.

It is not seen where the other references cited but not applied references are any more pertinent.

In view of the above applicant's Claims 1-7 and 10-12 are deemed allowable over these references. An early notice of allowance is deemed in order and is respectfully requested.

Respectfully submitted,

  
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